Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

46—18

Proceedings of the American Academy of Arts and Sciences.

Vol. XLVI. No. 18. — March, 1911.

CONTRIBUTIONS FROM THE ZOÖLOGICAL LABORATORY OF THE MUSEUM OF COMPARATIVE ZOÖLOGY AT HARVARD COLLEGE, E. L. MARK, DIRECTOR. — No. 218.

DIVISION OF LABOR AMONG ANTS.

By Edith N. Buckingham.

With a Plate

(Continued from page 3 of Cover.)

VOLUME 46.

1. GRAGG, F. A. — A Study of the Greek Epigram before 300 B.C. pp. 1–62. September, 1910. $1.25.
2. HURWITZ, S. H. — The Reactions of Earthworms to Acids. pp. 65–81. September, 1910. 40c.
3. PEIRCE, B. O. — The Magnitude of an Error which sometimes affects the Results of Magnetic Tests upon Iron and Steel Rings. pp. 83–93. September, 1910. 30c.
4. EVANS, G. C. — Note on Kirchhoff's Law. pp. 95–106. September, 1910. 25c.
5. TOLMAN, R. C. — The Electromotive Force produced in Solutions by Centrifugal Action. pp. 107–146. September, 1910. 65c.
6. CARPENTER, F. W. — Feeding Reactions of the Rose Coral (*Isophyllia*). pp. 147–162. 1 pl. October, 1910. 30c.
7. LEWIS, G. N. — On Four-Dimensional Vector Analysis, and Its Application in Electrical Theory. pp. 163-181 October, 1910. 35c.
8. PEIRCE, B. O. — The Resistivity of Hardened Cast Iron as a Measure of its Temper and of its Fitness for use in Permanent Magnets. pp. 183–204. 1 pl. October, 1910. 40c.
9. PEIRCE, B. O. — The Magnetic Permeabilities at Low Excitations of two kinds of Very Pure Soft Iron. pp. 205-212. October, 1910. 25c.
10. BAXTER, G. P., and CHAPIN, H. C. — A Revision of the Atomic Weight of Neodymium. First Paper — The Analysis of Neodymium Chloride. pp. 213-244. November, 1910. 50c.
11. THOMPSON, M. D., and LOMBARD, R. H. — (LIV.) On the Equilibrium of the System consisting of Calcium Carbide, Calcium Cyanamide, Carbon, and Nitrogen. pp. 245–270. November, 1910. 45c.
12. JEFFREY, E. C. — The Nature of Some Supposed Algal Coals. pp. 271–290. 5 pls. December, 1910. 80c.
13. PIERCE, G. W. — Theory of Coupled Circuits, under the Action of an Impressed Electromotive Force, with Applications to Radiotelegraphy. pp. 291–322. January, 1911. 50c.
14. BRIDGMAN, P. W. — The Action of Mercury on Steel at High Pressures. pp. 323-341. 1 pl. January, 1911. 35c.
15. MOORE, C. L. E. – Infinitesimal Properties of Lines in S_4 with Applications to Circles in S_3. pp. 343-362. January, 1911. 35c.
16. PHILLIPS, H. B. — The Indeterminate Product. pp. 363–370. January, 1911. 20c.
17. KENNELLY, A. E. — Vector-Diagrams of Oscillating-Current Circuits. pp. 371–421. 65c.
18. BUCKINGHAM, E. N. — Division of Labor among Ants. pp. 423–508. 1 pl. March, 1911. $1.25.

Proceedings of the American Academy of Arts and Sciences.

VOL. XLVI. No. 18. — MARCH, 1911.

CONTRIBUTIONS FROM THE ZOÖLOGICAL LABORATORY OF THE MUSEUM OF COMPARATIVE ZOÖLOGY AT HARVARD COLLEGE, E. L. MARK, DIRECTOR. — No. 218.

DIVISION OF LABOR AMONG ANTS.

BY EDITH N. BUCKINGHAM.

WITH A PLATE.